

MARATHON OIL COMPANY REPORT

Michael Budihardjo

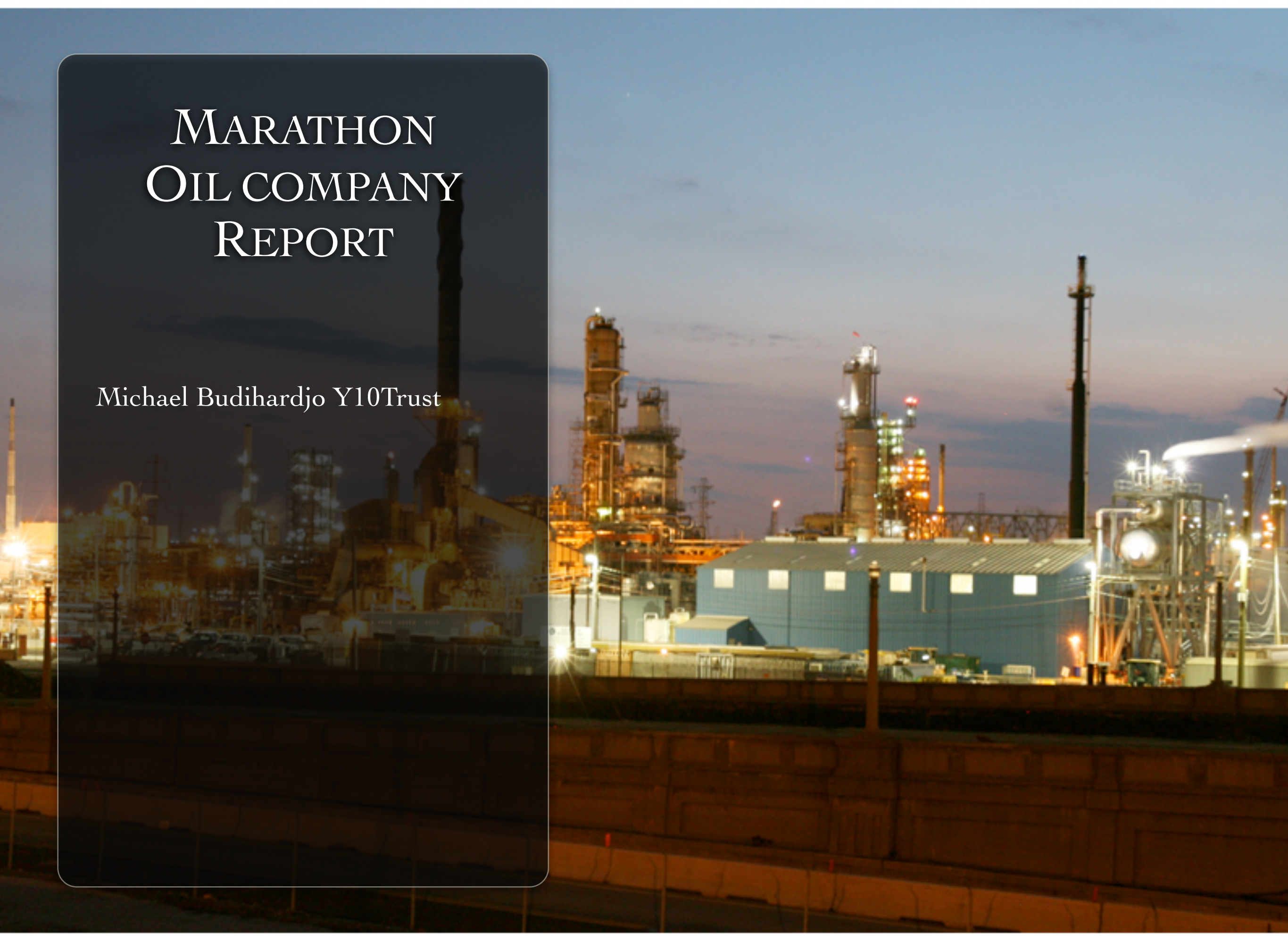


MARATHON OIL COMPANY

Marathon Oil Company is a United States based company, which produces oil and operates natural gas exploration. The company stations with the United States, but it also has operations around the world, including Canada, Algeria, Mexico, Poland, UK and Indonesia.

MARATHON OIL COMPANY REPORT

Michael Budihardjo Y10Trust



CHAPTER 1

Financial Highlights

NOTES

- My company, Marathon Oil Company, has been paying dividends starting from 2004, and the dividends have been increasing steadily until 2010, where it decreased.
- All numbers in are in millions, and are rounded-off

	2004	2005	2006	2007	2008	2009	2010	2011
Revenues	49	63	65	64	77	9	12	15
Net income	11	14	15	14	17	5	7	8
Dividends	0.51	0.60	0.76	0.92	0.96	0.96	0.70	0.71
Stockholder's equity	8,000	12,000	15,000	19,000	21,000	22,000	24,000	17,000
	5.1E+07	6E+07	7.6E+07	9.2E+07	9.6E+07	9.6E+07	7E+07	7.1E+07
per share	6375	5000	5066	4842	4571	4364	2916	4176

DIVIDENDS PER SHARE	04-05	05-06	06-07	07-08	08-09	09-10	10-11
COMMON DIFFERENCE	-1375	66	-224	-271	-207	-1448	-1260
COMMON RATIO	0.78	1.01	1.05	0.94	0.95	0.67	1.62

The average Revenue of the Marathon Oil Company:

$$(49+63+65+64+77+9+12+15) / 8 = \$44.25 \text{ M}$$

The average Net Income of the Marathon Oil Company:

$$(11+14+15+14+17+5+7+8) / 8 = \$11.375 \text{ M}$$

The average of Common Difference of Net income:

$$\{(14-11)+(15-14)+(14-15)+(17-14)+(5-17)+(7-5)+(8-7)\}/7$$

$$=1\text{M}$$

The average of Ratio of Net income:

$$\{(14/11)+(15/14)+(14/15)+(17/14)+(5/17)+(7/5)+(8/7)\}/7$$

$$=(0.78+1.07+0.93+1.21+0.29+0.71+0.875)/7$$

$$=0.84$$

The average Dividends of the Marathon Oil Company:

$$0.51+0.60+0.76+0.92+0.96+0.96+0.70+0.71 / 8 = \$0.765 \text{ B}$$

The average Dividends per share of the Marathon Oil Company:

$$6375+5000+5066+4842+4571+4364+2916+4176 = \$4664$$

The average of Common Difference of Dividends per share

$$\{(5000-6375)+(5066-5000)+(4842-5066)+(4571-4842)+(4571-4842)+$$

$$(4364-4571)+(2916-4364)+(4176-2916)\} / 8$$

$$= (-1375+66-224-271-207-1448+1260) / 8$$

$$= \$-2199$$

The average of Ratio of Dividends per share

$$\{(5000/6375)+(5066/5000)+(4842/5066)+(4571/4842)+(4364/4571)+$$

$$(2916/4364)+(4716/2916)\} / 8$$

$$=(0.78+1.01+1.05+0.94+0.95+0.67+1.62) / 8$$

$$= 7.02 / 8$$

$$=0.8775$$

The average of Stockholders' equity:

$$8,000+12,000+15,000+19,000+21,000+22,000+24,000+17,000/7$$

$$=17,250$$

CHAPTER 2

NOTES

COMMON DIFFERENCE IS THE
AVERAGE OF DATA OF 2004-2005,
2005-2006, -2006-2007, 2007-2008,
2009-2010, 2010-2011

COMMON RATIO IS THE
AVERAGED DATA OF 2004-2005,
2005-2006, -2006-2007, 2007-2008,
2009-2010, 2010-2011

Dividends per Share

Arithmetic Sequence:

$$a + (n+1)d$$

on Dividends per Share

$$a = 6375$$

$$d = -2199$$

$$\text{General Equation: } 6375 + (n+1)(-2199)$$

$$= 4176 - 2199n$$

Geometric Sequence:

$$a_n = a \times r^{(n-1)}$$

on Dividends per Share

$$a = 6375$$

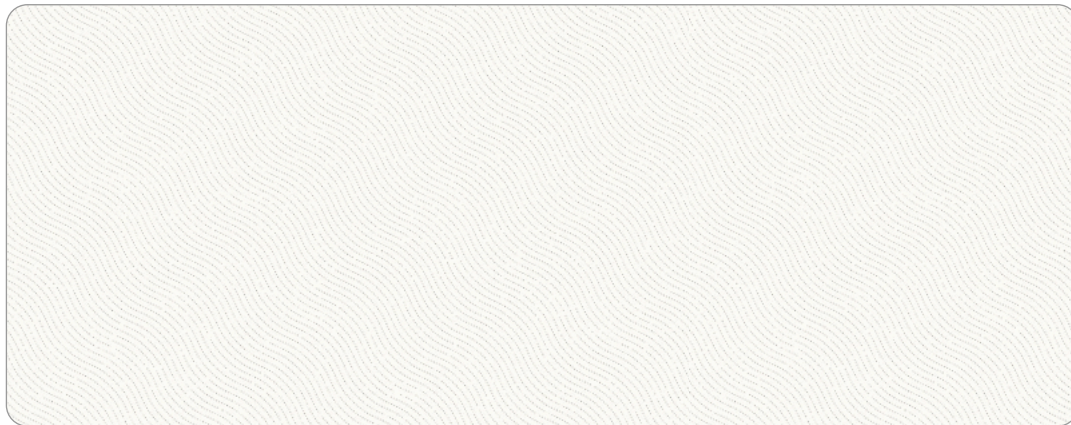
$$r = 0.8775$$

$$\text{General Equation: } 6375 \times 0.8775^{(n-1)}$$

YEAR	AP VALUE FROM 4176-2199N	ACTUAL DATA	DIFFERENCE	PERCENTAGE ERROR
2004	1977	6375	4758	0.746%
2005	-222	5000	4778	0.9556%
2006	-2421	5066	2645	0.522%
2007	-4620	4842	222	0.046%
2008	-6819	4571	-2248	-0.49%
2009	-9018	4364	-4654	-1.066%
2010	-11217	2916	-8301	-2.847%
2011	-13416	4176	-9240	-2.213%

YEAR	GP VALUE FROM $6375 \times 0.8775^{(N-1)}$	ACTUAL DATA	DIFFERENCE	PERCENTAGE ERROR
2004	5594	6375	781	0.122%
2005	5594	5000	-594	-0.1188%
2006	4909	5066	157	0.030%
2007	4307	4842	535	0.110%
2008	3780	4571	791	0.173%
2009	3317	4364	1047	0.239%
2010	2910	2916	6	2.06%
2011	2554	4176	1622	0.388%

CHAPTER 2 Dividends per share to be earned during 2013-2019



YEAR	GP FORMULA OF $6375 \times 0.8775^{(N-1)}$
2013	2241
2014	2967
2015	1726
2016	1514
2017	1328
2018	1166
2019	1023

Total : 10,965

Sum of the dividends of GP formula

By the formula :

$$S_n = \frac{a(r^{n-1})}{r - 1}$$

YEARS	SUM	RATIO
13	2241	
13-14	9244	1.32
13-15	-40450	0.05
13-16	1896	0.92
13-17	1689	0.91
13-18	1487	0.90
13-19	1308	0.89

Total : -22585

YEARS	AP FORMULA OF 4176-2199N
2013	-15,615
2014	-17,814
2015	-20,013
2016	-22,212
2017	-24,411
2018	-26,610
2019	-28,809

Total : -155,484

Sum of the dividends of AP formula

YEARS	SUM	DIFFERENCE
13	-15,615	
13-14	33430	2200
13-15	417090	13415
13-16	250254	31299
13-17	590495	51242
13-18	119550	73454
13-19	3497340	161335

Total : 4,892,544

By the the formula:

$$S_n = \frac{n}{2}[2a + (n - 1)d]$$

Percentage Error

Arithmetic Sequence

General Equation: $6375 + (n+1)(-2199)$

Testing on Year 2006, where the dividends per share was \$5066

$$\begin{aligned}\text{Therefore: } 6375 + (3+1)(-2199) \\ &= 6375 - 8796 \\ &= -2421\end{aligned}$$

Geometric Sequence

General Equation: $6375 * 0.8775^{(n-1)}$

Testing on Year 2006, where the dividends per share was \$5066

$$\begin{aligned}\text{Therefore: } 6375 * 0.8775^{(3-1)} \\ &= 6375 * 0.8775^{(2)} \\ &= 6375 * 0.77000625 \\ &= 4908.789844\end{aligned}$$

CHAPTER 3 Revenues 2013-2019 using unfamiliar functions

* In this case, year 2004 is year 1 in the graph, therefore years 2013-2019 would be years 10-16

	2004	2005	2006	2007	2008	2009	2010	2011
Revenues	49	63	65	64	77	9	12	15

Function: x^3

Equation: ax^3+bx^2+cx+d

where $a = 0.93434343$

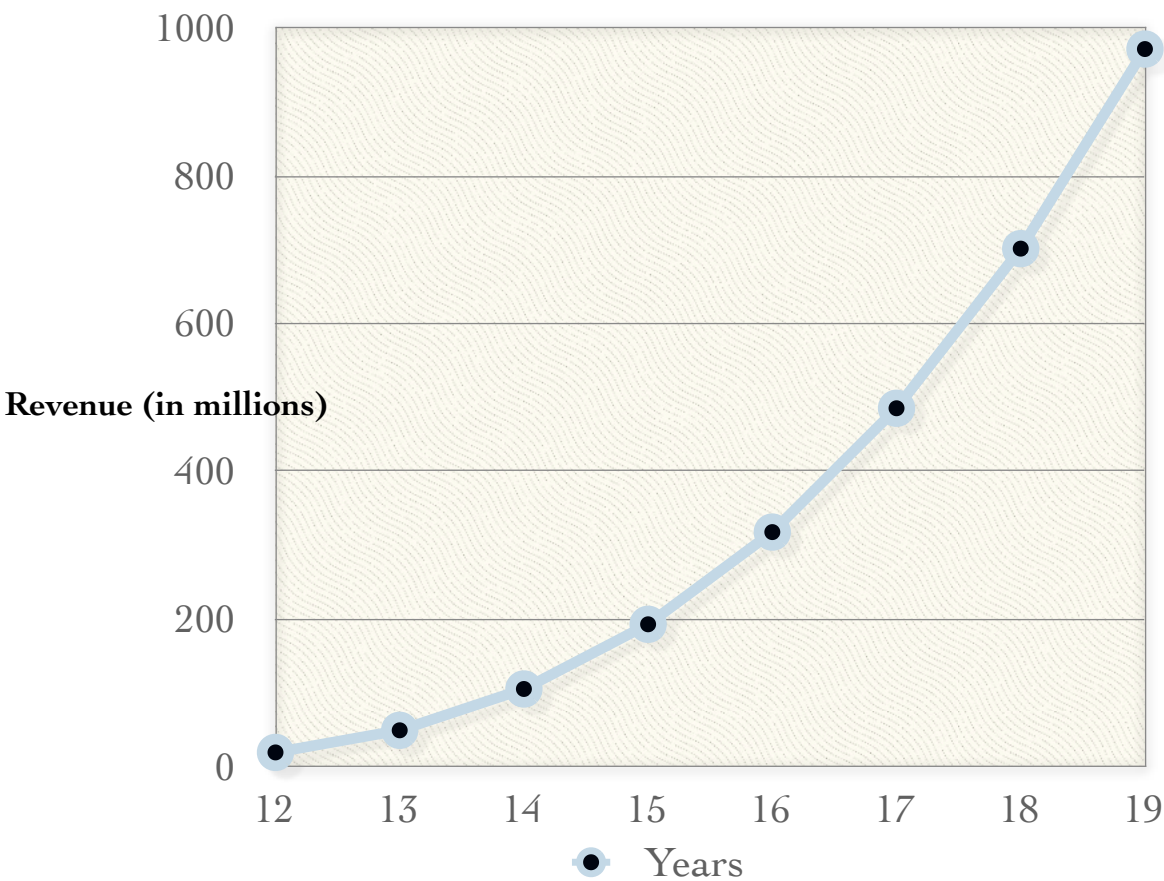
$b = -15.018398$

$c = 62.0472582$

$d = -3.3571428$

2012	2013	2014	2015	2016	2017	2018	2019
19.67	49.61	105.55	193.10	317.90	485.53	701.60	971.74

Predicted Revenue through 2012-2019



During 2008-2009, the Global Financial Crisis might have played a major role in effecting the business of the Marathon Oil Company, causing the revenue to suffer a massive drop. But the trend also shows that during 2009-2010, 2010-2011, the revenues are slowly picking up. In the first equation, the numbers of the suddenly decline might have affected results, therefore in this second equation, I will only use the data of the years before 2009, since another prediction is that the Marathon Oil Company would start off with the same uptrend that it has experienced before the Global Crisis.

2004	2005	2006	2007	2008
49	63	65	64	77

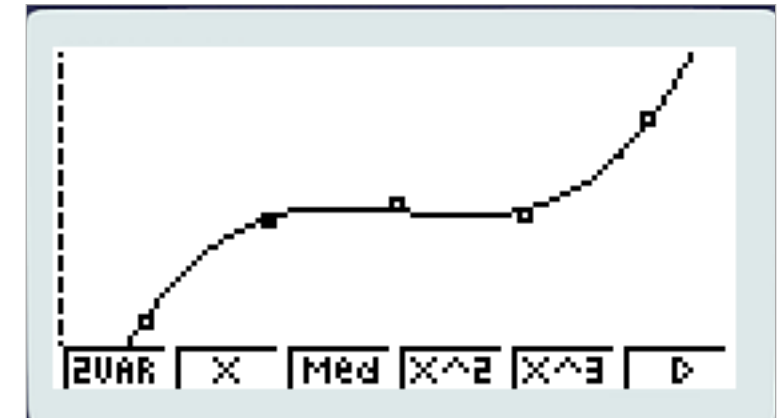
Equation: ax^3+bx^2+cx+d

a= 2.16666666

b= -19.857142

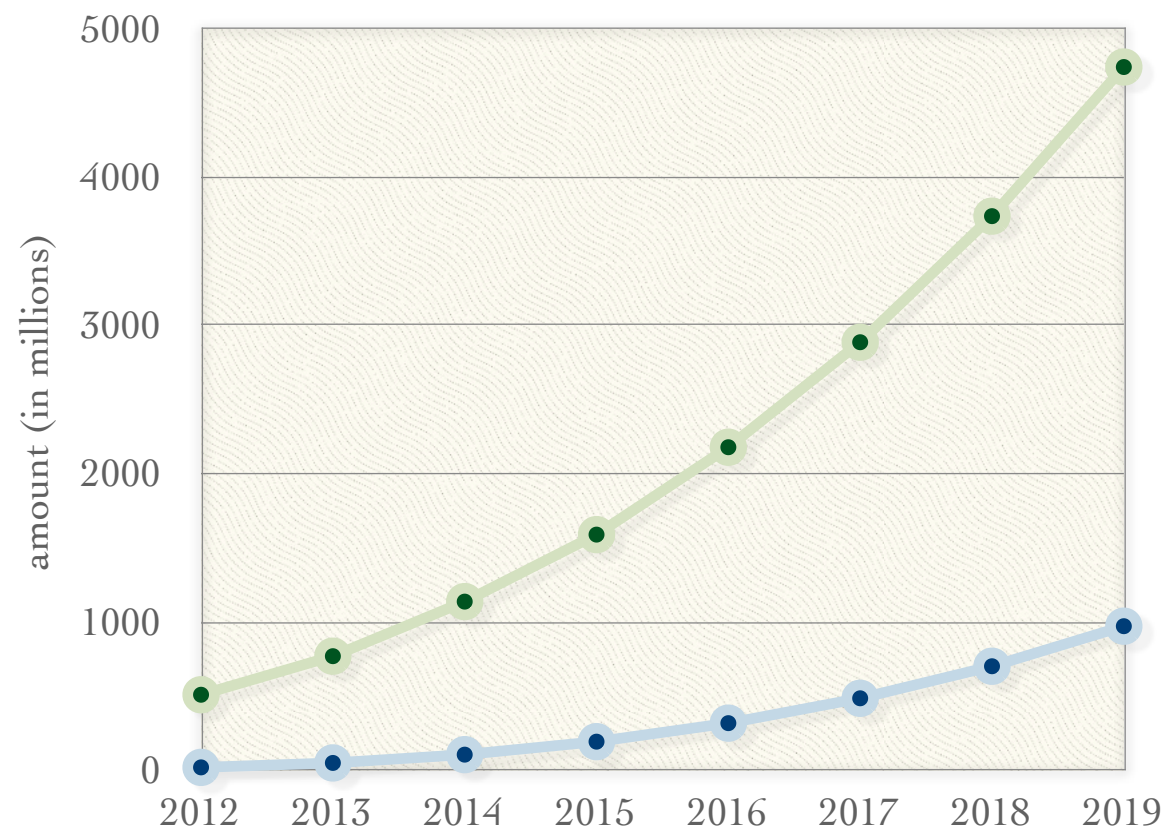
c= 58.9761904

d= 7.6



2012	2013	2014	2015	2016	2017	2018	2019
509.45	769.52	1137.45	1589.34	2178.60	2886.60	3736.88	4742.45

Comparison with the 2 trends



- represents the trend of predictions taken from the 1st equation
- represents the trend of predictions taken from the 2nd equation

	2004	2005	2006	2007	2008	2009	2010	2011	
• Net income	11	14	15	14	17	5	7	8	(Numbers are in billions)

Arithmetic Sequence:

General Equation: $11 + (n-1)(1)$

2013 is the 10th year of the data

Therefore:

$$11 + (10-1)(1)$$

$$= 11 + 9$$

$$= 20B$$

From the equation it is predicted that the company would earn 20M in 2013. This result is not reasonable, since it doesn't agree with the company's net income trend. Although the data only presents the company's net income till 2011, it is still unreasonable to say that the company would earn 20B in 2013 when in 2011 the company is only earning 8M. During the years 2008-2009, the company suffered from a drop of net income, and the trend shows that it is only starting to slowly increasing its net income, therefore it should be impossible for the company to earn 20M in 2013, within such a short time.

Using the General Equation generated, here are the predictions for the up coming years for the net income of the company:

General Equation: $11 + (n-1)(1)$

2012- $11 + (9-1)(1)$
= 19M

2014- $11 + (11-1)(1)$
= 21M

2015- $11 + (12-1)(1)$
= 22M

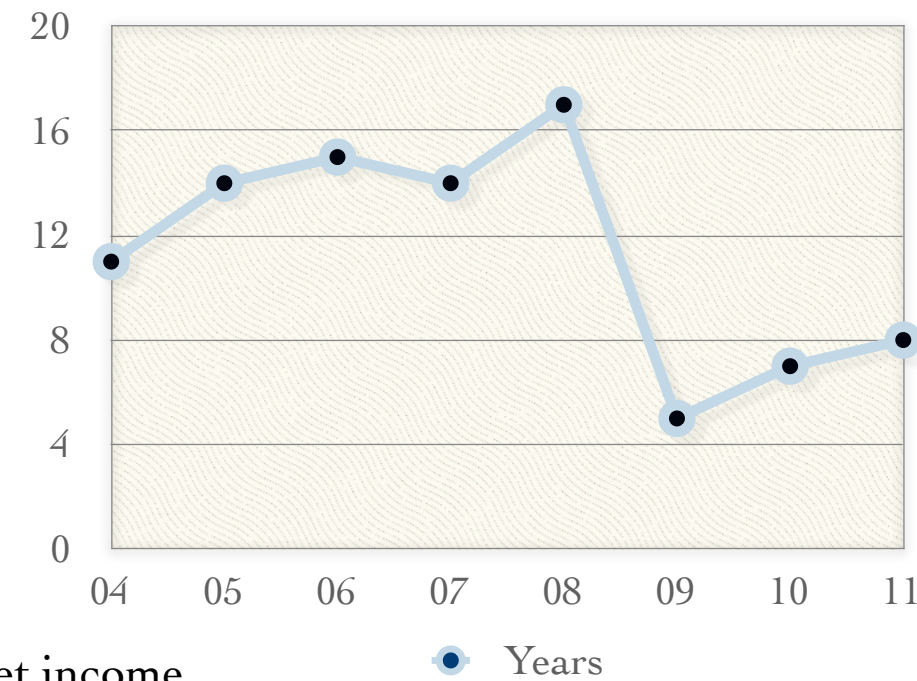
2016- $11 + (13-1)(1)$
= 23M

2017- $11 + (13-1)(1)$
= 24M

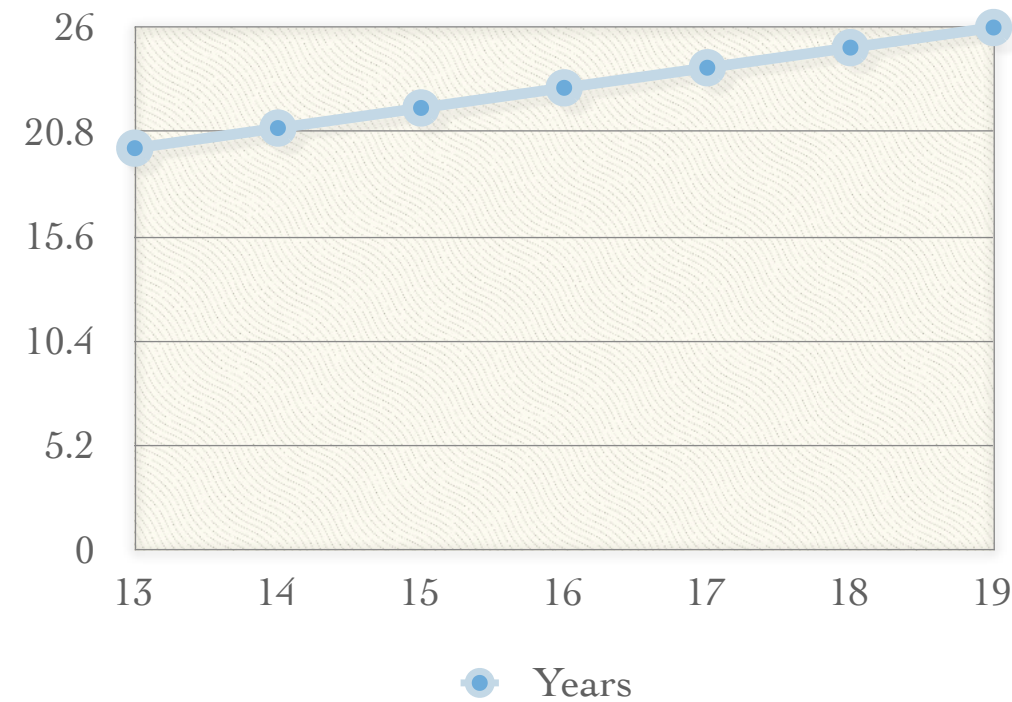
2018- $11 + (14-1)(1)$
= 25M

Net income (in millions)

Net income during 2004-2011

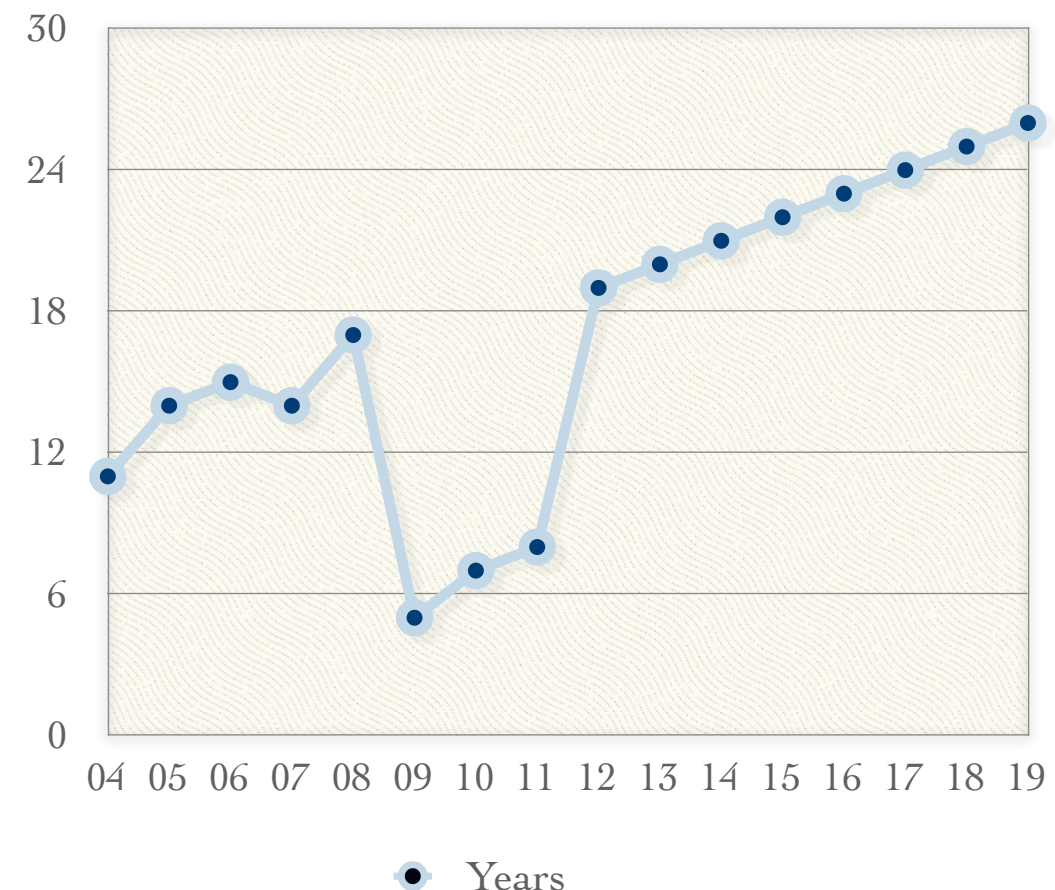


Predicted net income during 2013-2019



From the results using the formula giving by the Arithmetic Sequence, here is the graph generated

Growth of Net income of Marathon Oil Company 2004-2019



The predictions are not reasonable. From this graph it shows that the company would continue to have a rise on net profit in the up coming years. It is impossible since the company has just suffered from a profit drop in 2011. And with the economic inflation in the US, the company should face challenges to earn even the smallest profits. Unless the company transfers its operations into a country with a more stable and rich economy like China, it couldn't achieve such numbers. And since this is not the case, the predictions aren't reasonable.

2004 2005 2006 2007 2008 2009 2010 2011

• Net income 11 14 15 14 17 5 7 8

Numbers are in millions

Geometric Sequence Formula:

General Equation : $11 * 0.84^{(n-1)}$

Using this formula to predict the net profit earnings during 2013,

$$11 * 0.84^{(10-1)}$$

$$= 11 * 0.84^{(9)}$$

$$= 11 * 0.208$$

$$= 2.288 \text{ M}$$

This result shows that the Marathon Oil Company would earn about 2 million during 2013. The results might be reasonable for various reasons. Firstly since the company's businesses surrounds the United States, its earnings would depend on the US's economic status. These few years the US has suffered from inflation, where the price of oil is definite to rise and yet many couldn't afford. With less customers, the net profit is definite to reduce. Secondly many are going towards electrical cars since it is more environmentally friendly, oil wont be required anymore, therefore it is also a factor why the earnings are reduced. Other factors that might have affected their businesses could be for example the recent hurricane that occurred in the states, which their business within the effected area is definite to be delayed for some time. For the coming years, the company would face these challenges, therefore the prediction where the company would probably earn about 2 million during 2013 is acceptable.

$$2012: 11 * 0.84^{(8-1)}$$

$$= 11 * 0.248$$

$$= 2.728 \text{ M}$$

$$2014: 11 * 0.84^{(11-1)}$$

$$= 11 * 0.175$$

$$= 1.925 \text{ M}$$

$$2015: 11 * 0.84^{(12-1)}$$

$$= 11 * 0.1475$$

$$= 1.6225 \text{ M}$$

$$2016: 11 * 0.84^{(13-1)}$$

$$= 11 * 0.123$$

$$= 1.353 \text{ M}$$

$$2017: 11 * 0.84^{(14-1)}$$

$$= 11 * 0.104$$

$$= 1.144 \text{ M}$$

$$2018: 11 * 0.84^{(15-1)}$$

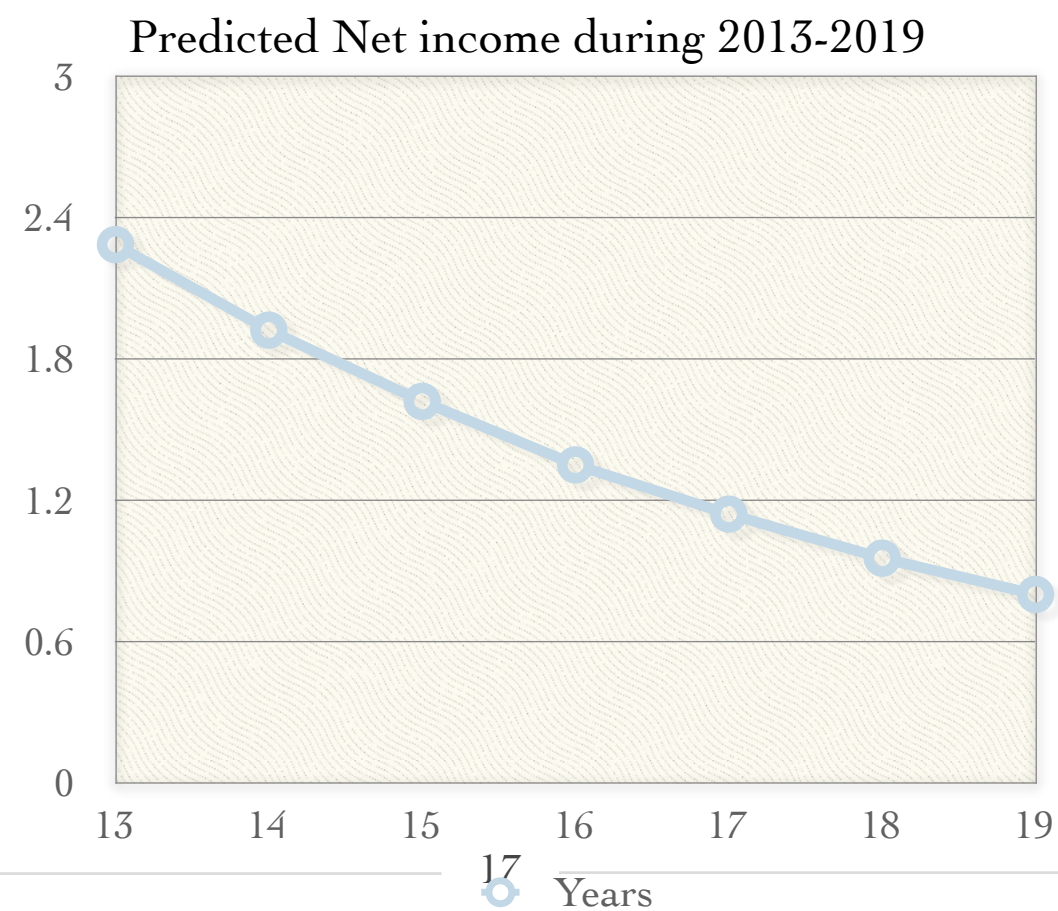
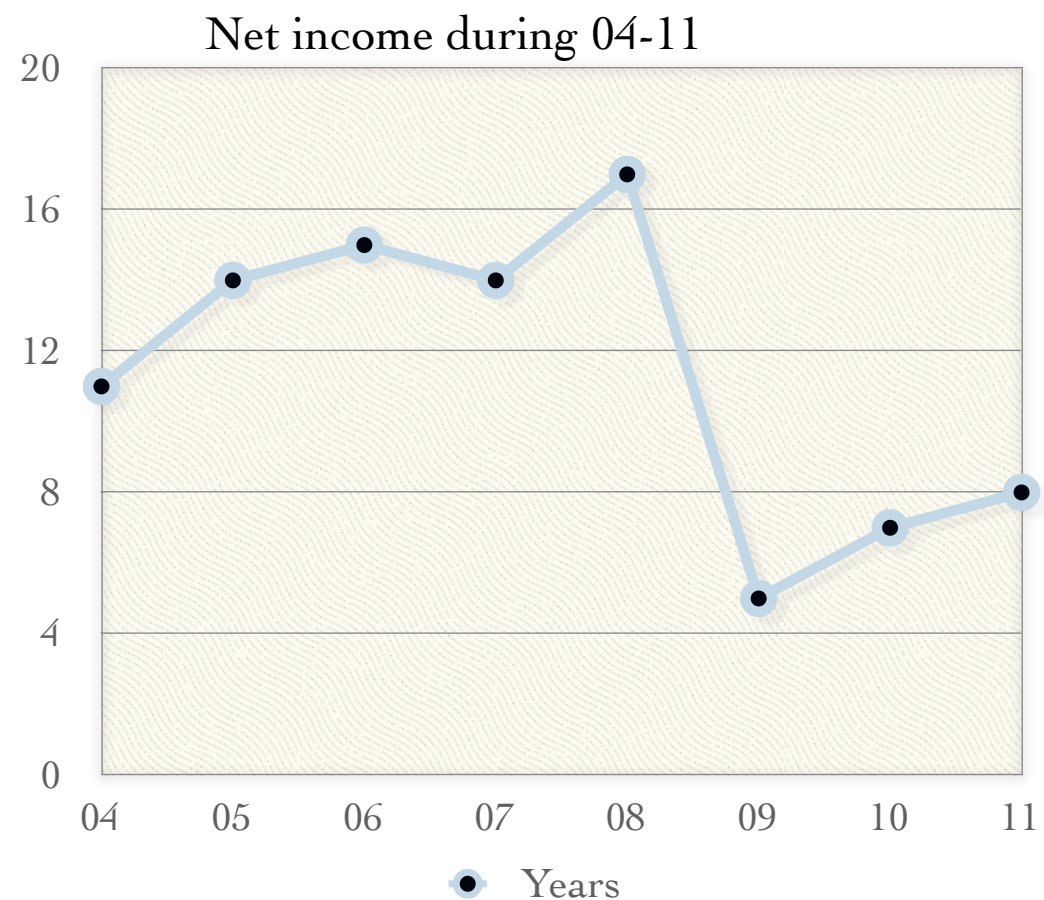
$$= 11 * 0.087$$

$$= 0.957 \text{ M}$$

$$2019: 11 * 0.84^{(16-1)}$$

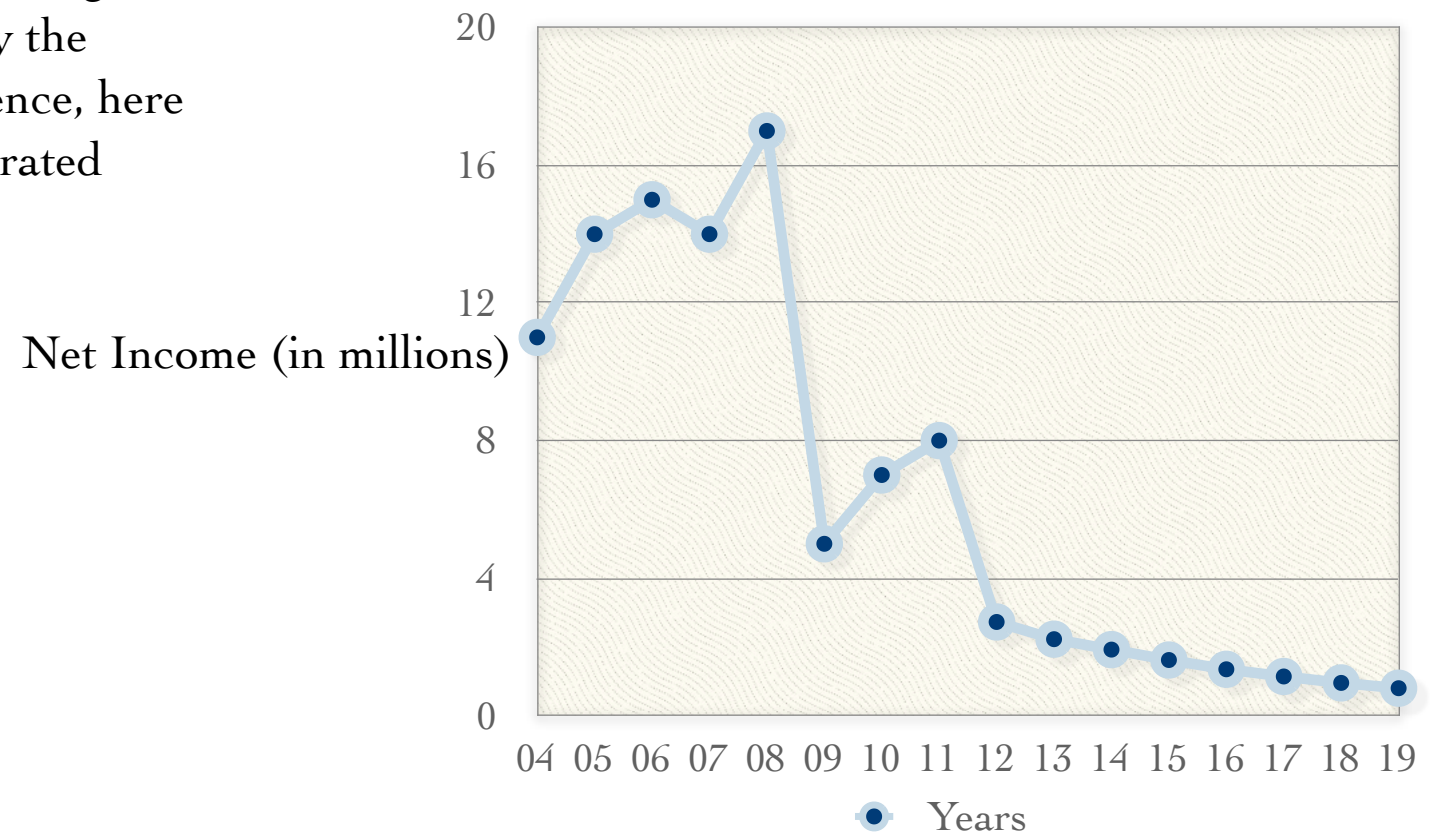
$$= 11 * 0.073$$

$$= 0.803 \text{ M}$$



Growth of Net income of Marathon Oil Company 2004-2019

From the results using the formula giving by the Geometric Sequence, here is the graph generated



The trend of the graph shows that the net profit of the Marathon Oil Company will continue to drop in the up-coming years. Although the large difference of net profit indicated during the years 11-12 are questionable, it is reasonable since there are many challenges that has to be faced in the US economy. Its financial management could also be the reason why it is struggling to earn more net profit. During **2009**, the revenue of the company was 9 million, with 5 million of net income, the lowest within the data. Yet the company distributed 0.96 million as dividends, the same amount as 08, where it achieved the highest revenue of 77 million and 17 million net income. From the data, it can also be seen that after the drop of revenue in 09, stockholders have withdrawn their shares, from 24,000 to 17,000. The graph shows that starting from year 2018, the company would start to earn less than 1 million, and continuing to earn less in the next years. The trend reveals that the company would eventually go out of business.

Percentage Error

Arithmetic Sequence:

General Equation: $11 + (n-1)(1)$

Calculating the year 2005, where the net income is 14 million

$$11 + (2-1)(1) \\ = 12$$

Calculating the year 2009, where the net income is 5 million

$$11 + (6-1)(1) \\ = 16$$

Geometric Sequence:

General Equation :

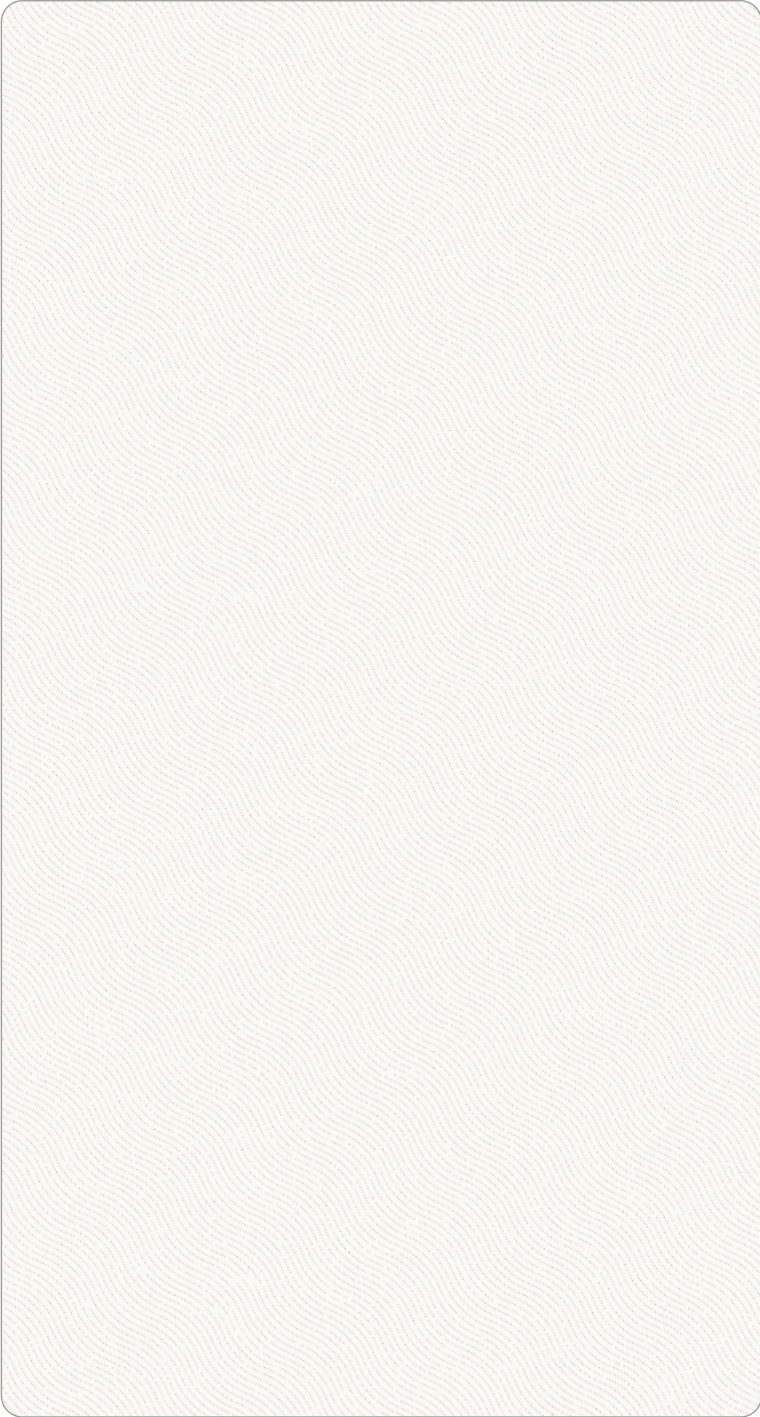
$$11 * 0.84_{(n-1)}$$

$$11 * 0.84^{(2-1)} \\ = 9.24$$

$$11 * 0.84^{(6-1)} \\ = 4.6$$



Conclusion



In conclusion, I do not recommend buying shares of the Marathon Oil Company. By observing the data, the massive drop of revenue was evident that the company is unstable and it is hard to predict the future trend of the company. And since oil is starting to come to shortage around the world; prices of oils are inflated which forces many to give up their cars; globally electrical cars are becoming more and more popular and preferred, and in the long future, it will be the 'car of the future', where oil would no longer be required, which all the above would ultimately affect the business of Marathon Oil Company.

Through my findings on the Dividends per share, Net income and Revenues of the company using arithmetic and geometric sequences formulas and the square function, the overall prediction is that the company would start to earn less and less, ultimately start to lose money and in a worst case scenario, it would be broke.